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Response under 37 C.F.R. § 1.116  
Expedited Procedure  
Examining Group 1700

PATENT  
ATTORNEY DOCKET NO.: 043694-5015-03

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of )

Woong Kwon KIM )

Application No.: 09/964,739 )

Filed: September 28, 2001 )

For: LIQUID CRYSTAL DISPLAY DEVICE HAVING )  
THIN GLASS SUBSTRATE ON WHICH )  
PROTECTIVE LAYER FORMED AND )  
METHOD OF MAKING THE SAME )

Confirmation No.: 2171

Group Art Unit: 1772

Examiner: S. Hon

Mail Stop AF

Commissioner for Patents  
U.S. Patent and Trademark Office  
2011 South Clark Place  
Customer Window, Mail Stop AF  
Crystal Plaza Two, Lobby, Room 1B03  
Arlington, VA 22202

Sir:

**DECLARATION UNDER 37 C.F.R. § 1.132**

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TC 1700

I, Woong Kwon Kim, do hereby make the following declaration:

1. I am the inventor listed on Application No. 09/964,739 filed on September 28, 2001.

2. I received a Masters Degree(s) from

Pohang Institute of Science & Technology  
University(s)/Educational Institutions

3. I have read the above-identified 09/964,739 application file, including (a) the specification, drawings and claims, (b) the Final Office Action dated June 19, 2003, the applied references to (c) *Kitayama et al.* (U.S. Patent No. 5,654,057) (hereinafter "*Kitayama*") and (d) *Margalit et al.* (U.S. Patent No. 5,606,438) (hereinafter "*Margalit*"), and (e) the proposed Request for Reconsideration to the Final Office Action.
4. My invention includes, and Patent Application No. 09/964,739 discloses that both the organic and inorganic layers prevent transmission of cracks by "compressive stress." See page 7, lines 13-18 in the as-filed specification. The referred to compressive stress is imparted to an adjacent glass substrate by either the organic or inorganic layers, which are themselves in tension.
5. The organic and inorganic layers, which include a transparent protective layer, are formed on the outside of the glass substrate.
6. Because the transparent protective layer is in tension and is formed on the glass substrate, the transparent protective layer imparts a compressive force to the outside of the glass substrate on which it is formed.
7. One skilled in the art of transparent protective layers would understand from reading the Specification of Patent Application No. 09/964,739 that an organic layer formed on an outer surface of a substrate does not have a compressive stress in and of itself. Rather, an organic layer formed on a substrate that is irradiated with ultraviolet light will cause the organic layer to shrink, thereby imparting compressive stress to the underlying substrate.

I further declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: Sep. 9, 2003

By: Woong Kwon Kim  
Woong Kwon Kim